

U.S. Patent Application Serial No. 10/516,941
Amendment filed November 10, 2008
Reply to OA dated July 10, 2008

REMARKS

Claims 1-19 are pending in this application, with claims 9-15 withdrawn from consideration. Claim 17 is canceled without prejudice or disclaimer, and claims 1-8, 16, 18 and 19 are amended herein. Upon entry of this amendment, claims 1-16, 18 and 19 will be pending, with claims 9-15 withdrawn from consideration. Entry of this amendment and reconsideration of the rejections are respectfully requested.

No new matter has been introduced by this Amendment. Support for the amendments to the claims is discussed below.

Regarding election-of-species requirement.

Claims 16, 18 and 19 have been rewritten to remove their dependency from withdrawn base claims 13, 14 and 15, respectively, by reciting the product-by-process limitations of the respective base claims.

However, Applicant respectfully requests rejoinder and examination of withdrawn claims 9-15.

Claims 1-8, 16-19 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-10 of U.S. Patent No. 7,309,381. (Office action page 2)

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The rejection is obviated by the filing of a terminal disclaimer over U.S. Patent No. 7,309,381. The terminal disclaimer papers are filed concurrently with this Amendment.

Claims 1, 2, 16-19 are rejected under 35 U.S.C. §102(a) as being anticipated by JP 2002-045385. (Office action page 3)

Claims 1-8, 16-19 are rejected under 35 U.S.C. §103(a) as being unpatentable over JP '385. (Office action page 3)

The rejections are overcome by the amendments to the claims. Specifically, claim 1 has been amended to recite “a canister for preventing fuel vaporization,” and to explicitly recite the “canister case,” with the latent-heat storage type adsorbent composition being placed in the canister case. Support for this amendment may be found, for example, at page 1, lines 6-8, page 7, lines 20-24, original claim 17, etc.

JP '385 has no disclosure regarding a **canister for preventing fuel vaporization** or a **canister case**. JP '385 merely discloses a latent-heat storage type adsorbent composition (the heat-retention material) [note: the phrase “moisture retention material” in the English translation of the PAJ abstract of JP '385 is a mistranslation of “heat retention”] that is used for medical devices, devices for protection against cold, materials for building construction, and the like (see the “Effects of the Invention” section in paragraph [0028] of JP '385). The claims, which have been amended to require a “canister case,” are therefore not anticipated by JP '385.

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Moreover, JP '385 aims to remove unpleasant odors or chemical smells, and imparts to the heat-retention material a function as a heat-generating material with quick and stable temperature reproducibility by microwave radiation (see the "Problem to Be Solved by the Invention" section in paragraph [0006] of JP '385). On the other hand, the present invention aims to prevent changes in temperature due to adsorption/desorption heat, caused by repeated adsorption and desorption of fuel vapor from automobile gasoline and the like.

The canister of the present invention and the heat-retention material of JP '385 are thus completely different in terms of objective, technical field, and the like, and JP '385 does not suggest the canister limitation of the present claims.

Accordingly, the inventions as defined in amended claims 1-8, 16, 18 and 19 are novel and unobvious over JP '385.

Claims 1-8, 16-19 are rejected under 35 U.S.C. §103(a) as being unpatentable over Steelman et al. 5,506,293 taken with Klett 6,673,328. (Office action page 3)

Reconsideration of the rejection is respectfully requested.

Specifically, the Examiner asserts that although Steelman differs from the present invention in not using activated carbon, the use of the activated carbon of Klett in Steelman is an obvious expedient to provide a heat adsorbing material.

In Steelman, however, there is no disclosure of an adsorbent itself. In the first place, the invention of Steelman is directed to an isotropic resin composition, and merely discloses a

conductive or dielectric resin composition for use in structural adhesives and the like

(Steelman, column 1, lines 13-20, and column 2, lines 38-43); hence, the composition of Steelman is completely different from the latent-heat storage type adsorbent composition for adsorbing and desorbing fuel vapor of the present invention in terms of objective and technical field. The present invention is clearly not obvious over Steelman, taken alone.

Likewise, Klett nowhere discloses a latent-heat storage type adsorbent composition for adsorbing and desorbing fuel vapor. Klett discloses a carbon foam produced from a mesophase or isotropic pitch (Klett, column 4, lines 20-22). **This carbon foam has a pore diameter of several tens to hundreds of micrometers (Klett, Table II), and thus is incapable of significantly adsorbing and desorbing fuel vapor.** In fact, the range of pore diameters suitable for adsorption and desorption of fuel vapor is from 10 to 50 Å (page 9, lines 15-17 of the present specification).

Furthermore, although Klett discloses that a phase-change material can be used (Klett, column 5, lines 23-27), **the carbon foam is filled with the phase-change material without using microcapsules.** Therefore, the carbon foam of Klett is different in structure from the latent-heat storage type adsorbent composition of the invention, wherein microcapsules containing a phase-change material are adhered to the surface of the adsorbent. Furthermore, even if the carbon foam *per se* were capable of adsorption and desorption, when the carbon foam is directly filled with a phase-change material, **the phase-change material turns into a liquid via a phase transition, and**

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is thereby adsorbed into the pores of the foam, thus leading to the loss of the adsorption/desorption capability.

Therefore, even if Steelman's fiberballs microencapsulated with phase change material were somehow used as the phase change material in Klett, the combination would not have an adsorbent capable of adsorbing fuel vapors. The present invention is unattainable by the combination of Steelman and Klett.

Accordingly, amended claims 1-8, 16, 18 and 19 are not obvious over Steelman and Klett, taken separately or in combination.

If, for any reason, it is felt that this application is not now in condition for allowance, the Examiner is requested to contact the applicant's undersigned agent at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

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In the event that this paper is not timely filed, the applicant respectfully petitions for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees which may be due with respect to this paper, to Deposit Account No. 01-2340.

Respectfully submitted,

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Enclosures: Petition for Extension of Time
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